



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/771,827

02/03/2004

Ozgur C. Leonard

15437-0600

3978

45657

7590

08/08/2008

HICKMAN PALERMO TRUONG & BECKER, LLP
AND SUN MICROSYSTEMS, INC.

2055 GATEWAY PLACE

SUITE 550

SAN JOSE, CA 95110-1089

EXAMINER

ARCOS, CAROLINE H

ART UNIT

PAPER NUMBER

2195

MAIL DATE

DELIVERY MODE

08/08/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/771,827	Applicant(s) LEONARD ET AL.	
	Examiner CAROLINE ARCOS	Art Unit 2195	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>04/23/2008</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-42 are pending for examination.

Oath/Declaration

2. The oath is objected to because it doesn't claim priority to application # 60/469,558.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCarthy et al. (US 2003/0037092 A1), in view of King et al. (EP1089173 A2)

5. As per claim 1, McCarthy teaches the invention substantially as claimed including a machine-implemented method, comprising:

establishing, within an operating system environment provided by an operating system, a first operating system partition which serves to isolate processes running within the first partition from other operating system partitions within the operating system environment such that processes executing in one operating system partition do not access or affect processes in any other operating system partition (203-1, Fig. 2A; 203, Fig. 2B; par.[0025], lines 8-12).

Associating a first partition share value with the first partition, wherein the first partition

Art Unit: 2195

share value indicates what portion of computing resources provided by a processor set has been allocated to the first partition (par. [0023], lines 1-4).

6. McCarthy doesn't explicitly teach associating a first process group share value with a first group of one or more processes executing within the first partition, wherein the first process group share value indicates what portion of the computing resources allocated to the first partition has been allocated to the first group of one or more processes.

7. However, King teaches associating a first process group share value with a first group of one or more processes executing within the first partition, wherein the first process group share value indicates what portion of the computing resources allocated to the first partition has been allocated to the first group of one or more processes (par. [0017]; par. [0030]; par. [0031]; par. [0043]; par. [0045]).

8. It would have been obvious to one of ordinary skill people n the art at the time the invention was made to combine McCarthy and King because King teaching of associating a first process group share value with a first group of one or more processes executing within the first partition, wherein the first process group share value indicates what portion of the computing resources allocated to the first partition has been allocated to the first group of one or more processes would improve McCarthy's system performance and would give a better control over resource management.

9. The combine teaching of McCarthy and King doesn't explicitly teach that scheduling a set of work from one of the processes in the first group of one or more processes for execution on the processor set, wherein the set of work is scheduled in accordance with a priority determined based, at least partially, upon the first partition share value and the first process group share value.

10. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to conclude from King teaching of allocating resource based on priority of the group and the partition resource share value would schedule a set of work from one of the processes in the first group of one or more processes for execution on the processor set, wherein the set of work is scheduled in accordance with a priority determined based, at least partially, upon the first partition share value and the first process group share value which would improve system performance by scheduling the most important job first and keeping a resource management within the boundaries of process group and partition allowance.

11. As per claim 2, McCarthy teaches a global administrator sets the first partition share value (partition resource allocator; fig. 2A; par. [0023], lines 1-4).

12. As per claim 3, McCarthy teaches a partition administrator sets the first process group share value (20-1, fig. 2A; par. [0009], lines 3-10).

13. As per claim 4, McCarthy teaches the processor set comprises one or more processors (par. [0025], lines 3-4).

14. As per claim 5, King teaches determining, based at least partially upon usage history, whether all of the processes in the first group of one or more processes have consumed up to the portion of processing resources indicated by the first process group share value (col. 6, lines 33-49).

15. As per claim 6, King teaches in response to the determination that all of the processes in the first group of one or more processes have consumed up to the portion of processing resources indicated by the first process group share value, assigning a lower priority to the set of work (col. 12, lines 13-19; wherein lowering group weight is lowering the priority to the set of work).

16. As per claim 7, King teaches determining, based at least partially upon usage history, whether all of the processes in the first partition have consumed up to the portion of processing resources indicated by the first partition share value (col. 6, lines 33-49).

17. As per claim 8, King teaches in response to the determination that all of the processes in the first partition have consumed up to the portion of processing resources indicated by the first partition share value, assigning a lower priority to the set of work (col. 12, lines 13-19).

18. As per claim 9, King teaches in response to the determination that all of the processes in the first group of one or more processes have not consumed up to the portion of processing resources indicated by the first process group share value, and in response to a determination that all of the processes in the first partition have not consumed up to the portion of processing resources indicated by the first partition share value, assigning a higher priority to the set of work (col. 11, lines 52-56; wherein raising partition weight is assigning higher priority as claimed.)

19. As per claim 10, McCarthy teaches that a process with a highest relative priority has its set of work executed on the processor set next (par.[0007], lines 1-7; par.[0023], lines 8-11).

20. As per claim 11, McCarthy teaches the first partition share value represents a value that is relative to other partition share values sharing the computing resources (par. [0009], lines 10-14).

21. As per claim 12, McCarthy teaches the first partition share value represents a percentage of the computing resources allocated to the first partition (par. [0009], lines 10-14).

22. As per claim 13, King teaches that the first process group share value represents a value that is relative to other process group share values within the first partition sharing the computing resources (par. [0017]; par. [0030]; par. [0031]; par. [0043]; par. [0045]).

23. As per claim 14, King teaches first process group share value represents a percentage of the first partition's allocated computing resources that are allocated to the first group of one or

more processes (par. [0017]; par. [0030]; par. [0031]; par. [0043]; par. [0045]).

24. As per claims 15-28, they are the machine-readable storage medium of the method claims 1-14. Therefore, they are rejected under the same rational.

25. As per claim 29-42, they are the apparatus claims of the method claims 1-14. Therefore, they are rejected under the same rational.

Response to Arguments

26. Applicant's arguments with respect to claims 1-42 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

27. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

28. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

29. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CAROLINE ARCOS whose telephone number is (571)270-3151. The examiner can normally be reached on Monday-Thursday 7:00 AM to 5:30 PM.

30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

31. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Meng-Ai An/
Supervisory Patent Examiner, Art Unit 2195

/Caroline Arcos/
Examiner, Art Unit 2195